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ABSTRACT

The elderly rely heavily on health and welfare resources. Human services delivery system, programs either provide income and surrogate things (such as food, shelter, transportation, education, health care) or develop social roles (personal identity, employment, interpersonal relationships, independence). Generalizations and findings from research done on human services and delivery systems review such categories as cultural factors, religion and ethics, health, nutrition, physical environment, transportation, social services, communication, legal services, education, recreation, civic participation, commerce, employment and economic support. (BEF)

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OUR FUTURE SELVES:

A RESEARCH PLAN TOWARD UNDERSTANDING AGING

REPORT

OF THE

PANEL ON RESEARCH ON HUMAN SERVICES AND

DELIVERY SYSTEMS

NATIONAL ADVISORY COUNCIL ON AGING

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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Foreword

The need to provide more services to the aged is intensifying at the same time that difficulties in assuring that the services are effective and have bearable costs are becoming more evident. We have learned that many assumptions used in structuring our service systems were simplistic or wrong, not always shaped by a thorough understanding of the needs and nature of the clientele.

In all, there is a major need to understand through research how improvements can be made in defining what services are needed, in structuring and operating them, and in assuring that they reach the intended population. This report, prepared by a panel of the National Advisory Council on Aging, is a remarkable and indeed pioneering effort to address such needs. It was prepared under the guidance of a member of the National Advisory Council on Aging, Dr. Paul A. L. Haber of the Veterans Administration. It is the result of the contributions of time and knowledge of many people, listed in the appendix that accompanies this report. In time, many of the issues and research strategies outlined in this report will find their way into the system of care for the aged.

Robert N. Butler, M.D.

Director, National Institute on Aging

Contents

	Page
Cultural Factors	1
Religion-Ethics	3
Health	4
Nutrition	6
Physical Environment	6
Transportation	8
Social Services	9
Communication	10
Legal Services	11
Education	12
Recreation-Culture	13
Civic Participation	14
Commerce	15
Employment	16
Economic Support	18
Appendix: Acknowledgments	21
Selected Bibliography	23

The elderly, perhaps more than any other group in society, rely heavily on health and welfare resources. The lengthening postretirement period had exacerbated the problems of providing social and health services, maintaining income, and maximizing the ability of the elderly to function in society.

Our present service systems are flawed. Very little is known about how to organize and deliver a comprehensive range of services for the aging. Communities are often unable to respond effectively and efficiently to the age-related needs of individuals and families. Service programs are often not flexible enough for the person in need; in fact, sometimes they are not available. Even when service programs are available, persons who need them may be unaware of them.

Because of the varied and changing needs of older individuals, services must range from simple information to immediate, direct aid during a crisis. It is important to distinguish between those needs that result from an individual's life-style and those that are caused by the processes of aging. The elderly rely upon complex public and private institutions for their service needs. Superimposed upon the lives of the elderly, particularly the elderly with low incomes, is a vast array of complex statutory, regulatory, and decisional law.

A considerable body of research exists on some aspects of human services and delivery. In general, however, knowledge is fragmentary, static, and unrelated to the problems of maintaining the physical and psychological functioning of the elderly.

In a complex society such as ours, defining systems for delivery of services is a difficult task. One way of defining "system" is "that collection of activities resulting from programs primarily supported by public funds." These programs of services are less than adequate because policies for the aging are affected by broad economic, political, and social trends and by shifts in society's values. Most of the programs in the human services delivery system can be categorized as either (i) providing income and the things for which income is usually regarded as a surrogate (food, shelter, transportation, health care, entertainment, education), or (ii) developing social roles (personal identity, purposeful activity, employment, interpersonal relationships, independence, personal growth). These concepts are interrelated and correlated with biological psychological, cultural, and spiritual needs.

Some generalizations and findings from research done on human services and delivery systems follow. They are grouped into 15 categories, with the state of the art and suggested research needs given for each category.

Cultural Factors

Examination of public and private programs aimed at human betterment has shown that many of them fail because they do not understand recipients' culturally determined attitudes, beliefs, and values. Programs designed for married, affluent, white, urban Americans are sometimes barely workable; when the same programs are applied, unchanged,

to the poor, the widowed, members of minority groups, residents of rural areas, or citizens of other countries, outcomes are predictably disappointing. Social scientists have identified many of the barriers to effective program planning and utilization. They include traditional values, group behavioral norms, general resistance to innovation and risk-taking, tenacious patterns of group solidarity and loyalty, traditional loci of authority, language difference, and ethnic background and class.

Cultural factors are particularly important in programs for the aged because (i) aged populations are extremely heterogeneous (in terms of education, class, race, income, health, and so on) and (ii) aging itself is a cultural, as well as a biological, process. Culture invests the aging process with particular meanings and defines the appropriate relationship of the aged to themselves, to others, to social institutions, and to their environment.

Traditionally there has been little collaboration between anthropology and gerontology. Although applied anthropology has been a recognized subfield for years, its approaches have been little utilized in programs dealing with the elderly. Much of the literature in applied anthropology has pointed out a number of possible barriers to program implementation, including unspoken differences in values and attitudes; patterns of obligations that may conflict with program aims; and different perceptions of issues, ranging from the role of the service recipient to the appropriate stance of government.

Although the economic status of the elderly varies greatly by culture, what stands out is the fact that economic activities do not exist apart from other cultural patterns, although the relations may not be readily apparent.

While psychological factors in the aging process have been extensively discussed in the gerontological literature, they have seldom been combined with cultural considerations. For example, the Hindu, Thai, and Samoan elderly view death and dying as a transitional phase of life: The latter stages of life are a time for preparation for a good death. Much of the recent work on death and dying reflects Western cultural assumptions and calls into question the cross-cultural applicability of the goals of death counseling, as well as the cross-cultural implications of artificially prolonging life through advanced medical technology.

Aging within ethnic communities has received some attention. Intra-ethnic variation has also drawn some interest. Studies illustrate that groupings such as "Asian-Americans" do not reflect monolithic cultural entities, but are comprised of distinct cultural groups. Furthermore, ethnic communities are not static or immune to change from outside -- although one cannot always predict the direction change will take.

We suggest the following research needs:

1) To set up a program ignoring cultural factors is to jeopardize the program and its potential recipients. One cannot assume that a program will have the same results across cultures; in fact, such assumptions may not only render a program useless, they may even exacerbate existing problems. Cultural traits do not exist in isolation; anthropological information is essential to clarify the links between traits and to locate points of stress between program and recipient.

2) Cross-national research is not equivalent to cross-cultural research. The former generally focuses on statistical information; the latter, while it does not deny the value of statistical data, must go beyond statistics to more intensive methods of data collection. As a rule, the more dissimilar the cultures, the more tenuous direct comparison of statistics becomes. Aside from problems of mistranslation, short answers to straightforward questions may conceal differences in the respondents' assumptions, thus creating problems in interpretation. Intensive research may reveal that the very categories used to elicit information are inappropriate or have different implications in different cultures.

3) While some longitudinal studies have been conducted in the United States, there is a paucity of longitudinal material from other cultures on which to base comparisons. Yet such data are necessary for the study of aging as a process. Age-stratified research confuses historical and personal change, and it will require cross-cultural longitudinal data to separate them.

4) In connection with the above point, one focus for longitudinal research that offers much potential is the cultural epidemiology of stress. Longitudinal research would focus on culturally patterned stresses, noting the tasks presented to the individual through the course of his life, the resources provided for completing those tasks, and the appropriate (and inappropriate) ways of utilizing these resources. In this way, the specific stresses associated with a particular cultural and physical environment, for any age group, can be identified and used to fit programs to needs.

Religion-Ethics

Spiritual and moral belief systems offer important supports to the aged, contributing to their well-being in both subtle and obvious ways. Yet little research was done before the first White House Conference on Aging in 1961, and only a modest increase occurred in the decade after. The 1971 White House Conference on Aging gave expression to the concept of "spiritual well-being," generating hope that its emphasis would inspire new efforts in research in the next few years. A review of the 40,000 entries in Shock's bibliographic series reveals that only 0.5 percent of them are ostensibly in the domain of religion-ethics. The upcoming definitive Handbook on Aging lacks any article on this subject. What research has been done is essentially empirical work on the dimensions of religiosity among the aged. Those dimensions may be characterized as (i) organizational participation, (ii) the meaning of religion to the aged, (iii) religion and personal adjustment for the aged, and (iv) religion and death.

We suggest the following research needs:

1) Explication of the role that religious-ethical values play in a social system dominated by economic expedience; how attitudes are formed and changed in society.

2) Spiritual well-being as an indicator of quality of life.

3) Ethics of surrogate management of personal and business affairs of elderly individuals whose frailty, illness, or senility solicit surrogate agents (research in this area could formulate protective policy).

4) Death and dying; the rights of the individual to dignity in death; euthanasia.

Health

Research into health care delivery systems for the elderly must take into account three basic phenomena: First, the aged require more health care, especially long-term care; second, they are less capable economically, physically, and socially to obtain such care without assistance; and third, health care professionals have been less motivated, less well trained, and less financially rewarded in providing health care for the elderly than for other age groups. Some ten percent of the population age 65 and over accounts for 20 to 25 percent of all short-term hospitalizations, 80 percent of nursing home beds, and 27 percent of annual expenditures for personal health care.

Only recently has mental health in the aged been considered different from mental health in other age groups. Epidemiological data have shown that five percent of the aged population have severe pychiatric disorders, both organic and functional.

Providing dental care for the aged presents problems in many areas. In addition to prevention, diagnosis, and treatment of disease, there are other, equally important concerns: for example, the system for delivering services and the nutritional, social, psychological, financial, and educational status of the patient. Data from studies of nursing home populations indicate that two-thirds of the patients are in need of dental treatment.

Because of the complex intertwining of health and social factors, both in the causes of disability and in the management of it, long-term care must be provided in the context of family, community, and cultural life patterns. Long-term health care is provided in a variety of settings, including institutions and communities. Because it is so complex, the delivery of long-term health care must be multidisciplinary and multi-agency. It cannot be the responsibility of any single health or social profession or of any single facility or program. Within the spectrum of long-term health care, the inpatient facility has had the most dramatic growth over the past several decades. This has been caused by such social and cultural changes within the nation as increased mobility of families and new legislation (reimbursement for some forms of long-term institutional care).

Much of the research into the problems of health care delivery systems for the aged has dealt with the formulation and evaluation of functional measurement, through scales, tests, matrix formation, and so forth. A plethora of such devices has been developed, but no one system has yet had general acceptance or application. The need for such evaluation scales has derived from the now generally accepted thesis that the elderly are a heterogeneous population. Thus there is a need for classifying the elderly into subgroups based upon some criterion other than chronological age (such as functional capacity -- physical, mental, and social). In one series of investigations, populations of cohorts were studied with respect to various physical and psychological characteristics. Such cross-sectional analyses purport to demonstrate age-related change. Another means of defining the normative aging process has been through longitudinal studies on one

or more cohorts. Conclusions from both kinds of studies have led to the belief that decreasing function does not necessarily proceed in a straight line with advancing age, that individual variation renders generalizations about functional decline extremely hazardous.

Research in mental health care delivery to the aging indicates that the standard methods, such as short-term pharmacotherapy and individual and group psychotherapy, are in woefully short supply to meet the needs of the rapidly expanding older population. Epidemiological data indicate that approximately 15 percent of the population age 65 and older are in need of mental health treatment. The incidence of suicide in depressed older patients is at least three times as high as in younger patients. The elderly who are mentally ill may be responsive to appropriate treatment.

Many long-term care facilities are isolated, with only minimal administrative or professional relations with other facilities or community-based health and social service organizations and programs. Studies of utilization patterns of long-term care services have indicated that use tends to follow reimbursement mechanisms. Some data indicate that when reimbursement for institutionalization is established, utilization of institutional care increases. The category of intermediate care facility was created by legislation, in part as an attempt to contain the escalating costs of long-term institutional care. One result of this development was a reverse financial incentive toward improving patients' ability to function; as patients improve, they may be classified at a lower level of care and, therefore, a lower level of reimbursement.

More long-term care institutions have a mix of patients whose needs range from sophisticated rehabilitation services, through maintenance care over a long period, to humane, supportive care during the process of dying. No single institution can provide the medical care and caring atmosphere necessary for such a mix of patients.

We suggest the following research needs:

1) Measurement of health care needs and evaluation of quality of services; the extent and priority of need and demand for health services by the elderly.

2) Health care delivery through (i) a system specifically for the elderly or a system for all age groups or (ii) disease-specific clinics or systems or a generalized system (for example, a one-stop clinic).

3) The relation of funding mechanisms of adequacy, efficiency, and cost-benefit of health care delivery systems; effectiveness of funding the components of the service system compared with funding an integrated system.

4) Impact of reimbursement strategy of successive levels of health care on utilization, on quality of care, and on acceptability to the older person.

5) Design of health care systems based on knowledge of the relation of health condition to aging process or to cohort life history; measurement of health status in relation to characteristics other than chronological age.

Nutrition

For the independent elderly, obtaining a healthful and satisfying diet depends fundamentally on what food is available and what food the individual chooses to eat. Where income is a factor in obtaining food, food stamps can be used as an income supplement.

Services at the nutrition end of the health care continuum are preventive in nature. Older persons often need help with weight control, diabetes, and other chronic disorders requiring dietary treatment -- or just general improvement in their dietary habits. With failing health and loss of family and friends, the elderly may have increasing difficulty preparing food. Support services that may be brought to bear include shopping assistance, home-delivered meals, and homemaker services.

Organization and delivery of nutritional services for the elderly cannot be effective without information on their nutritional status. Such information is essential for identifying nutritionally vulnerable groups, monitoring the impact of economic conditions, recommending changes in food assistance programs, determining food enrichment regulations, regulating food labeling and advertising, and directing mass education programs.

The U.S. Department of Agriculture has conducted studies on food consumption since 1936, with the most recent such study in 1965. The ten-state nutrition study of 1968-1970 provided medical, dental, clinical tests, and dietary evaluations of more than 3000 persons age 60 and over; but because it was directed toward people in low-income areas, it was not representative of the total elderly population. A number of agricultural experiment stations are working now on instruments and methods for determining personal and social factors related to food choices and eating behavior of selected populations. Another survey of 1,000 persons over the age of 60 in a rural county of New York State found almost one quarter were following a special diet for a medical reason. Of this number, 35 percent had questions about their diet indicating the need for diet counseling.

We suggest the following research needs:

1) Nutritional surveillance to (i) monitor the impact of economic conditions; (ii) recommend changes in food assistance and service programs; (iii) identify and locate nutritionally vulnerable groups; and (iv) give direction to mass education programs, based on life-styles, food technology, and marketing practices.

2) Techniques for monitoring nutritional status in various health care settings to provide direction for setting standards.

Physical Environment

Physical environments may either enhance and complement the quality of life for the aging adult or restrict the opportunities for independence and satisfaction in the later years.

There are major gaps in knowledge regarding the physical environments of the elderly, whether institutional or noninstitutional: the design and location of buildings (city, town, suburbs, rural); the organization of space in the environment; how the environment relates to the lcrger setting; linkages, proximity, and access to the services of the larger setting; how people select and obtain living arrangements; how they change and adapt to the environment; and the meaning, status, and other symbolic aspects of the environment. Furthermore, we need to understand how differences in culture, life-style, family relationships, the meaning of time, and communication patterns affect the design of the environment. Other aspects for study are density, crowding, privacy, and stress and their effect on behavior.

Interest in man's relation to his environment has been growing rapidly. A considerable body of research exists on a few topics in this area -- housing and crime, relocation, moving patterns, morale, and satisfaction with housing. Our knowledge, however, is fragmentary, static, and seldom related to the problems of maintaining physical and behavioral functioning in the older population.

The Urban Institute estimates that 2.4 million persons age 65 and over do not need institutionalization but do need appropriate shelter and services in order to remain out of institutions. Surveys of living arrangements have been conducted under both census and grant auspices. They have typically categorized populations by the traditional components of living arrangements (that is, with whom the respondent is living), gross housing type (that is owned or rented), or duration of current residence. Some studies of living conditions, attitudes, and satisfactions of specific population groups have been or are being conducted (widows; residents of public housing; residents of age-segregated, age-integrated apartments; relocated populations).

In all these surveys, primary emphasis has been placed on the respondent elderly, rather than on how their living conditions or nearby environments may affect them.

A few studies reported that moving into improved housing benefits the elderly, a conclusion supported by longitudinal study. In addition to increased satisfaction with life, greater well-being, and more desirable life-style for the elderly, improved housing lowers death and institutionalization rates. The longitudinal study notes, "Not only has better housing increased the length of life; it has also increased the quality of the extra years."

Environmental research leading to policies that better serve the needs of the elderly should be given high priority. Suggested areas for research, development, and demonstraton include:

1) Development of methods for the study of how man-environment relations affect the elderly.

2) Use of environment in personal growth.

3) Effect of environmental policy on quality of life of the elderly.

4) Effects of the micro- and macroenvironment on behavior of the aged, both in the community and in institutions.

5) Optimum service packaging in planned housing.

6) Optimum mixes in special environments -- that is, mixes in age, race and nationality, physical disabilities, socioeconomic status, and so on.

7) Matching personal needs with style of living -- that is, cooperatives, trailer parks, home-sharing, retirement communities, and so on.

8) The symbolic meaning of places, dwellings, and possessions to older persons.

9) How use of space varies with age.

10) Migration and residential mobility of the elderly population.

11) Identification of barriers to continued independent function; exploration of structural changes in environments that will facilitate and enhance life in the later years.

Transportation

Transportation is the element of the physical environment that links the elderly person to the services, facilities, resources, and opportunities necessary for his existence. Transportation is critical, whether for visiting and traveling, taking the individual to a service or facility, or bringing a service provider to the individual. Transportation, or the lack of it, also influences the effectiveness of other services for the elderly. Basic priorities and accompanying funding for transportation will remain inadequate; should strategy emphasize improvement for the elderly or for all travelers, including the elderly?

Serious attention to the role of transportation in the lives of older persons is a comparatively recent development. The subject received minimal attention at the 1961 White House Conference on Aging. It emerged as a priority area at the 1969 International Congress of Gerontology and the 1970 workshops sponsored jointly by the Administration on Aging and the U.S. Department of Transportation. The 1971 White House Conference on Aging ranked the question of transportation immediately after income, health, and housing.

Public transportation has become increasingly important with the general decline of the automobile as the primary mode of transportation. Further, automobile ownership declines with age. This decline is mostly a result of the lower incomes of the elderly, but it is also influenced by their decreasing physical and psychological ability to drive. Studies indicate a greater dependence on walking among the aged, but walking is limited by the inadequacy of pedestrian accommodations and security. Studies also indicate that public transportation is least adequate for those most in need of it -- the physically frail, individuals with no friends or relatives to drive them, minority group members, and the poor. Work is currently in progress on defining needs in order to permit more realistic further study.

We suggest the following research needs:

1) Transportation needs must be examined, as well as concepts of transportation. Study should be directed toward latent need rather than latent demand, which tends to stress the current income position of transportation authorities. Similarly, cost-benefit analyses must take into account trade-offs between increased services and institutionalization. Further examination must be made of the impact of the built-in bias in favor of the commuter.

2) The role of the physical conditions and limitations of the elderly must be studied, especially as to how they differ from the problems of the younger physically handicapped. Specific aspects needing further study are vision, hearing, and movement; balance, carrying of packages; access to signal cords or buttons; the amount of time needed to get on and off vehicles; accommodations for walking; and the relative impact of cohort or socioeconomic environments and age (cross-sectional versus longitudinal approach, to sort out factors inherent in the aging process).

3) Careful study should be made before and after the introduction of new transportation systems (especially new mass systems). Further testing is necessary for models of alternatives to existing systems (door-to-door, rail versus bus, expressway or freeway with feeder-distributor, and so forth). Studies of costs must examine the costs if no transportation were available and the relation of cost to independent living, dignity, and a desirable quality of life in later years.

Social Services

Social service programs for the aged should not be created without an understanding of how they are affected by age, sex, ethnic group identification, socioeconomic status, and the differences between urban and rural life. The bulk of our knowledge on subgroup differences stems from studies that classified the elderly by socioeconomic status, health, or chronological age. These studies suggest that an incomplete understanding of the characteristics of a target population may account for both underutilization of services and inability of services to reach their intended population. These studies conclude, "it is a mistake to limit analysis of need or utilization of services to the usual characteristics of race, age, income, etc.....Above all, the elderly's experience of relative deprivation may be more important in understanding needs than any of the more commonly employed indicators."

A series of studies designed to assess needs points to another problem that may influence use of services: lack of congruence between the needs of the elderly as perceived by the elderly and the needs of the elderly as perceived by professionals. The implications are that professional judgments are less valid, being bounded by professional expertise, and that, when professional judgments prevail, programs will fail to reach the populations for whom they are intended. A study of state agencies on aging notes the divergence between needs listed by older persons and goals identified by the state agencies. The study shows that one-third of the consumers listed priority needs that had no relation to priority goals established by the state agencies, another one-third's needs had only a tenuous connection to goals, and only one-third listed

needs that had a clear and direct connection to agency goals. This phenomenon is repeatedly documented, yet no clarificaton is offered regarding the effectiveness (use and impact) of program goals set by professionals versus those set by consumers.

There is a considerable body of research on the construction of appropriate delivery mechanisms. Although there has been a strong effort to coordinate services, this may be a premature goal because of the lack of services to coordinate. Instead, studies suggest that organizational forms incorporate features that will enhance innovation and the establishment of service programs to meet needs. Impact and outcome assessment, evaluation research, social accounting, cost effectiveness, or cost-benefit studies note that the greatest obstacles to evaluation are methodological, because no valid and reliable measures have been developed to assess component parts.

There is a basic lack of information concerning the effectiveness of current methods of providing services for the elderly. Research should focus on:

1) Methods for organizing and delivering services and how the way in which services are offered affects consumer usage.

2) Development of a variety of instruments to appraise the effectiveness of services and identify individual service requirements.

Communication

We know very little about specific benefits or costs of the communications media used to provide information about social services. Isolation from communication flows sometimes accompanies physical isolation. Communication by print -- fliers, pamphlets, notices, newspapers, and the like -- is the least effective substitute for face-to-face contact between older people and those responsible for interpreting laws, regulations, eligibility, and entitlements.

It is often assumed, incorrectly, that anything other than face-to-face communication is necessarily inferior. This assumption is incorrect because modern communications media allow trade-offs between telecommunications and transportation, sharing of valuable human resources among underserved populations, and other benefits. These media should be implemented as solutions ready and waiting to alleviate problems.

Over half the services provided to clients by public social service agencies are information exchanges of one sort or another and, hence, are directly amenable to enhancement by telecommunications. Some studies show that older adults watch television, on the average, three hours per day -- slightly less than the average for the total population. On the other hand, some studies found that television viewing increases as an activity with age. Studies reported that a majority of 204 old people in the Age Center of New England saw television viewing as an important recreational activity; in fact, television viewing ranks first among all activities of the elderly, according to some surveys. It has been reported that old people prefer personal, nonfiction programs in which people like themselves play important roles, either as members of the studio audience or as contestants. Other studies suggest that closed-circuit television can be regarded

as a therapeutic tool for the institutionalized aged. The older person "needs to share in a common body of knowledge regarding current affairs if he is to maintain points of contact . . . he needs communication services, and this is a communications need."

The kinds of communications services that older people need and want must be identified before technology can be used, or developed, to bring them about. Areas in which research is needed include:

1) What exchange of information (communication) is involved in determining eligibility for a specified service and in obtaining that service?

2) How is communication used to tell the elderly about a new service or changes in an established service? How are their questions answered?

3) How are education and training accomplished, both for providers and consumers of services? What components are not communications?

4) What communications are required to alleviate the isolation of the elderly, to promote resocialization and deinstitutionalization?

Legal Services

The complex public and private institutions upon which older people rely present bureaucratic mazes that even younger people find difficult to manage; personal freedom, dignity, and control of property are subject to the vagaries of the laws of guardianship, conservatorship, and involuntary commitment. Confronted with such crucial legal issues, the elderly have no place to turn for adequate, effective assistance.

Congressional hearings and other inquiries have demonstrated the inadequacy of legal representation. The elderly poor constituted only six percent of the Office of Economic Opportunity's Legal Services clients, although they made up almost 20 percent of the total poor. The 1971 White House Conference on Aging and the current Federal Council on the Aging have documented the need for legal services for the elderly and have strongly recommended programs and means of implementing them. A Congressional Resolution of October 1975 notes that older Americans, particularly those with lower incomes, are more likely to be victims of crimes than many other age groups of citizens; further, half of the victims suffer physical injury as a result of the crimes.

We suggest the following research needs:

1) Delivery of legal services in mobile units, both with and without other services.

2) Delivery of legal services as part of one-stop, multipurpose centers for senior citizens, rather than as storefront offices for legal services only.

3) Financing of legal services, potential inadequacies of the current mechanisms for compensating attorneys for representing the elderly (especially in personal-injury

and governmental-benefit cases), the role of the private sector, the possibility of standard fees and sliding fees, and the use of existing resources (government attorneys, law students, retired attorneys) as supplements to a salaried-attorney project.

Research is also needed in the following broader areas:

1) Prepaid and group legal services.

2) The individual's control over his own death.

3) The effects of zoning, land use, and control of growth on living patterns of the elderly.

4) Measurement of adequacy of care and treatment of institutionalized individuals.

5) Use of chronological age in legislation (hidden trade offs).

6) Social science research to evaluate legislative programs and provisions .

7) Analysis of the impact of new legislation -- retirement income, Supplemental Security Income, Age Discrimination Act, and Title XX (social services) of the Social Security Act.

8) Development of health insurance programs and legislation.

9) Impact of taxation and regulation on long-term care arrangements.

10) Collection and publication of statistics and other information with respect to the causes, types, and frequency of crimes.

11) Impact of crime on the victims, crime prevention, and safety education.

12) Methods and programs for reducing the frequency of crimes against older Americans.

Education

The main characteristic of research into adult educaton seems to be the paucity of it. Our review of published research reveals three general types: (i) "think" pieces on policy and program development issues, as well as broad overviews of adult, lifelong, and continuing education needs and accomplishment; (ii) reports of successful -- although typically idiosyncratic -- case histories and individual programs; and (iii) demographic surveys of people, programs, needs, accomplishments, and so on. There is a gap between laboratory studies of adult learning and the life-long education that people actually acquire. The Future Shock syndrome, of rapid obsolescence combined with increasing amounts of leisure, can be seen in the quantity and availability of continuing education, avocation, and activity courses and programs. Yet differences among age groups in values and in attitudes toward work, leisure, family, and life-style are scarcely considered.

It has long been assumed that intellectual abilities decline with age and that older people are incapable of learning. Yet laboratory studies have not found a steady decline in learning capacity of adults.

The realization that cross-sectional methods confuse age-related changes with historical changes has led many researchers to reconsider the learning capacity of adults. Although it is now evident that adults are more capable of learning than was previously believed, differences do exist between young and old in terms of abilities. Adults learn most when the subject matter is meaningful to them. Stressful or anxiety-producing situations lessen the adult's ability to perform a task he has learned. A related consideration is the environment in which learning occurs -- settings that are the least stressful come closest to ideal learning situations. Studies have shown that, when older people are given more time to process and respond to tasks, they use the extra time and improve their performance.

We suggest that the following research be done:

1) Study the application of noncognitive research findings to actual learning situations.

2) Investigative intervention techniques that might be used to modify apparent decrements in learning and education.

3) Develop methods for assessing educational program impact on adult learning for cohort-specific or age-related changes or decrements.

4) Study cultural-historical changes related to motivation and to performance.

Recreation-Culture

Recreational, cultural, and leisure activities are important to a person's well-being, self-esteem, and mental and physical alertness. The pursuit of these activities takes on new significance in the latter part of life, when many of the other components of life or role activities are curtailed. Although there is a tendency to deal with recreational cultural activities as philosophical issues rather than as empirical research issues, those activities seem to be amenable to research. It seems possible to sort them out, measure them, and classify them, in order to discern and understand patterns.

It is often difficult to distinguish among various aspects of leisure and between leisure and other aspects of life, such as education, civic participation, religion, communication, and social services. Published materials on the subject are of uneven quality, although there is a miscellany of studies that are suggestive and useful. Marked differences have been noted between the sexes in their approach to leisure; moreover, men exhibit differences in stance toward leisure over their life span. The relative value of work and leisure is more attributable to personality and sense of accomplishment than to economic need and hardship. Thus, some people view leisure and recreational activities negatively, regarding them as frivolous (perhaps representing a difference in generations). Nevertheless, class plays an influential role. The Nielsen technique of measuring

television viewing overestimates the amount of time the elderly spend watching television, since it does not distinguish between actual viewing and merely having the set turned on. The accessibility of public parks, movies, sports events, and live performances has been judged to be far lower for the old than for the young, by virtue of lower income, health problems, fear of crime, and transportation problems.

We suggest the following research needs:

1) Identify ways of easing the transition from the work years into retirement, emphasizing (i) continuity rather than crisis-oriented provision of service and (ii) the special problems of women.

2) Analyze how recreational, cultural, and leisure activities vary with (i) the extent and cohesion of family structure and kinship networks, (ii) living arrangements, (iii) school and neighborhood resources, (iv) social class, and (v) ethnic and racial communities.

3) Conduct experiments or clinical trials to test relevant variables and evaluate the impact of programs and services on the aged.

4) Identify ways of making recreational activities acceptable (that is, "serious" or constuctive) to those who might otherwise reject them as frivolous.

5) Study the role and significance of television in the lives of the elderly.

Civic Participation

Elderly people are less connected to the fabric of society because of their extrusion from their earlier roles, especially work and family, and thus are correspondingly more alienated from their community. Civic participation is a means of reestablishing this connection, providing the individual with a lost sense of meaningfulness.

When such factors as educational background, social class, and ethnic background are taken into account, political behavior, community organizational involvement, and volunteer activities are not noticeably different for older people than for younger people. The evidence from political scientists is that voting behavior remains remarkably consistent far into old age: Older people do vote, and they tend to vote for the party they have always voted for. There is no evidence of a voting bloc composed of the elderly. There has, however, been an enormous growth of lobby groups among the elderly, although their influence is doubtful. Other than voting, participation in political activity is rather infrequent.

The elderly who participate in community organizations appear to be a very select sample (who may represent their individual needs more than any constituency). The community organization often selects to represent in the community those elderly people who can be expected to go along with the organization's practices rather than those who might be critical.

Under special circumstances, a spontaneous development of community among elderly residents has occurred. When a peer family thus forms, the members assume roles in voluntary, mutual relationships.

Results of the Community Action Programs of the Kennedy era are difficult to interpret vis-a-vis their influence in effecting reforms. Certainly, however, some programs have more meaning for the elderly than do others.

We suggest the following research needs:

1) Evaluation of civic participation by the elderly: What functions are served and benefits gained from their volunteer activities and participation in organizations? What are appropriate roles for elderly volunteers?

2) Large-scale social experiments related to civic participation, particularly community and voluntary activity.

Commerce

There are three aspects of the role of the marketplace in regard to the older population: (i) the adjustment, in terms of goods, services, and structure, to the market necessitated by the lowered purchasing power of the older population; (ii) the problems of older people as consumers; and (iii) the possibility of the marketplace becoming a means of providing health, social, and other human services.

The marketplace takes little account of the older population as consumers; what account it does take is concentrated in a few fields. This lack of concern leads to the special problems of older persons as consumers and to the concentration of activity in regulation and enforcement rather than more positive consumer programs directed toward study of needs and ways to meet such needs.

In general, there has been little significant research on commerce and the elderly. There has been practically no market research, no investigation of whether the social disengagement that often accompanies aging makes the elderly more receptive to advertising. Several industries (health, life, and annuity insurance; banking services; housing; travel) have sought out the older market, but most of their efforts have been directed at the more affluent aged. More recent and rapid growth has been in the health care fields, such as health services, drugs, and nursing homes (the latter represents an estimated $7.5 billion business, mostly paid by public programs).

The remainder of the marketplace has failed to recognize the possibilities of the older market, estimated at some $60 billion in potential purchasing power in 1970 and representing some 12 to 13 percent of the total expenditures for goods and services. Not only do older persons spend practically all of their income, they maintain a fairly constant share of the market because their social security payments are adjusted upward. Fragmentary study has been made on the design of consumer products for the elderly, but results of these studies have not been applied (clothing for older women, furniture design, and so on). More study is going into the area of nutrition as a result of interest

developed by the federal programs under the Older Americans Act and the distribution of food stamps.

Congressional investigations of fraud and quackery, credit problems and the like illustrate the negative attitudes toward the older person as a consumer. Instead of studying the needs (both physical needs and psychological support of new roles), actual expenditure and consumption patterns, and new product development, they emphasize regulation and enforcement.

We suggest the following research needs:

1) Consumer product needs, such as clothing for older women, to be studied by socioeconomic characteristics as well as handicaps, and to include consideration of the product as role and adjustment enhancers.

2) Food and nutrition, through study of consumption and dietary patterns, shopping facilities, prepared foods, packaging, and so forth.

3) Food in institutions -- nutritional and social aspects.

4) Changing patterns -- consumer education versus increased purchasing power, neighborhood stores versus suburban supermarkets.

5) Product development and application of advances in electronics and technology; the role of human engineering and remote patient-monitoring devices.

6) Disaggregated data on basic needs and behavior as consumers.

7) Basic physical data such as optimum temperature, noise, and light levels.

8) Study of impact of ecological changes, pollution, and so on.

9) Complex of studies relating to provision of services through the marketplace: (i) Can it provide freedom of choice of services and of providers rather than being dictated by the provider? (ii) Can it lessen bureaucracy? (iii) Can it be more economical and efficient? (iv) Can it remove some of the stigma from the elderly (such as their dependence on welfare)? (v) Can it handle social intervention services as well as those labeled "social utility" (homemaker, health, friendly visiting)? What are the best procedures: vouchers, credits, stamps, other devices, as compared with present systems of direct provision of services by a public agency with third-party payments?

Employment

The participation of older persons (especially men) in the labor force has tended to decrease in every industrialized country since 1890 because of education obsolescence, compulsory retirement practices, and age discrimination practices.

It is well known by most researchers and many policy-makers that rates of participation in the labor force among men have been declining, at all ages, while an upward trend is the case among women of all ages. Current information suggests strongly that an increasing percentage of persons age 55 and older are no longer in the work force. This is in the face of increased years in retirement (with increased odds for inadequate income) and possibly slight increases in longevity.

While the United States does have an Age Discrimination in Employment Act (1967), there is no systematic, nationwide knowledge about patterns and levels of discrimination by industry and occupation, nature of older (45 to 65 years) applicants, and so on. The Employment Standards Administration of the Department of Labor is responsible for enforcing the Act, but it has not conducted any such research. At best, it can provide information based on the complaints it receives, which it may or may not investigate.

A longitudinal study shows a statistical correlation between rates of unemployment and admissions into mental hospitals. The data indicate that the greatest trauma, as measured by admission rates, is among men age 45 and over.

Survey research indicates that the main reason for "voluntary" retirement is ill health; the main reason for working full time after retirement age is the need for income.

There has been no sustained research interest in defining the concept of functional age, as contrasted to chronological age.

We suggest the following research needs:

1) The changing cultural and social expectations and norms among men and among women regarding their "place," particularly in regard to work.

2) The influence of rising desires for a higher standard of living (more things, more commerical leisure activities) among American families requiring wives to add to the family coffer by going to work.

3) Detailed age-composition (and sex-composition) studies of the age 65 and over populations at different intervals (for example, 1980, 1990, and 2000), not only for gerontological knowledge, but for knowledge concerning differentiation of income and other human service needs.

4) Relationship of changing nature of work to retirement decision.

5) Detailed analyses of data on work experience (which includes temporary workers) in contrast to data on labor force (part-time and full-time permanent workers), by age, sex, color, industry, number of weeks worked, occupation, and so on. The number of older persons in labor force data tables is lower than the actual number of such persons, age group by age group, who actually have had work experience in any given year. And the older the age group, the wider the discrepancy.

Economic Support

Except for that done by economists in the Social Security Administration and the Bureau of the Census, little work has been done on the economics of aging.

Data on money income of the older population show that it is essentially a low-income group with a disproportionate amount of poverty, as defined by federal standards. Among the aged, married couples seem to enjoy the best income position, with "unrelated" women (mostly widows) and members of minority groups at the bottom.

Data on wealth (net worth), as distinguished from money income, show that in 1967 the major asset was equity in a home. These homes have probably appreciated in value since then, but they do not represent a real, or liquid, asset. Most older people have no significant financial assets: 43 percent of the couples and 65 percent of unrelated individuals had less that $1,000, and 66 percent of the couples and 80 percent of the individuals had less than $5,000. The small amount of data by cohort indicate little prospect for future elderly to have improved financial status.

Nonmoney benefits and services seem to make a significant contribution to some older persons, but little is known about the size and distribution of these benefits. Special tax treatment of income is a sizable loss of revenue to government and an indirect gain to the aged, but there is considerably less special treatment for the elderly in regard to property taxes.

Social security remains the major source of retirement income and is estimated to be one-third the amount of preretirement earnings. Actuarial projections predict problems in the relation of social security income to outgo in the future. Policy will have to take into account demographic changes, inflation, economic growth, benefit level increases, and national priorities and equity.

Private pension plans are significant in the total retirement income picture but require further study and analysis; they cover a minority of employees and even fewer retirees, and seem to be primarily supplemental for the better-paid workers. The 1974 legislation provides major improvements but leaves these problems: Less than half of the workers are covered; there are no benefit level adjustments after retirement; state and local public employees are not included; there is no portability; there are inadequate survivor benefits; and there are added costs to provide minimal benefits to newly hired older workers.

Supplementary Security Income seems to be an improvement over Old Age Assistance, but little is known about its coverage, why the projected increases in beneficiaries did not materialize, and what impact the payments have had on recipients.

Medicare, providing third-party payment of certain h[illegible]osts, has obviously helped, but it is playing a decreasing role and seems to be most inadequate in the most serious area -- long-term care. Supplemental private health insurance plays a very minor role. There is still a significant number of special public programs dealing with limited aspects of health care and health care delivery. While we are searching for the most appropriate combination of programs to provide quality care at the lowest cost, we must be deciding how these costs -- whatever they turn out to be -- will be financed.

We suggest the following research needs:

1) Developments in social security and other nations' systems and experience.

2) Economic implications of alternatives to institutionalization and funding of costs of general health care.

3) Role of private pension plans and the growing superior position of two-pension retirees (better-paid employees with higher social security and private plan benefits) over other retirees.

4) Impact of increased early (before age 65) retirement: labor market aspects, length of credited service, length and level and recency of credited earnings, exposure to inflation, costs of adequate benefit levels, work substitutes.

5) Study of retirement income as a proportion of income just prior to retirement.

6) Study of projections of future retirement income levels and adequacy, and role of individual preparation efforts, such as savings.

7) Disaggregation of economic data for study of economic status and measurement of equity.

8) Multidisciplinary study of projected health care needs, costs, funding, and so on and implications for national health insurance provisions.

9) Cost-benefit analyses of present programs and delivery systems.

10) Relation of pension payments and of public and private pension systems to savings and capital formation.

11) Standard and more useful definitions of household, family, economic unit, consumption unit, and so on, in order to improve availability, validity, comparability, and usefulness of collected data.

12) Study of consumption and expenditure patterns and how they change.

Appendix

Acknowledgments

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